**Options** 

**Title:** ssb\_sc\_f...crimination

**Author:** shashank

Output Language: Python Generate Options: QT GUI Variable

ID: samp\_rate
Value: 32k

Variable
ID: msg\_amplitude
Value: 10

Variable
ID: carrier\_amplitude

Value: 1

Variable
ID: mu
Value: 10

Variable ID: fc Value: 10k Variable ID: fm Value: 1.5k

**QT GUI Time Sink** Name: Message Signal **Number of Points:** 1.024k Sample Rate: 32k **QT GUI Time Sink** Autoscale: Yes Name: Modulated Signal **Number of Points:** 1.024k **QT GUI Frequency Sink Band Pass Filter Sample Rate:** 32k Name: Message Signal Interpolation: 1 Autoscale: Yes **Signal Source FFT Size:** 1024 Gain: 1 **Throttle** Sample Rate: 32k Center Frequency (Hz): 0 Sample Rate: 32k Waveform: Cosine Bandwidth (Hz): 32k **Low Cutoff Freq:** 10k Sample Rate: 32k Limit: None Frequency: 1.5k **High Cutoff Freq:** 11.5k **Amplitude: 10 Transition Width:** 1 Offset: 0 Window: Hamming QT GUI Frequency Sink **Initial Phase (Radians):** 0 **Beta:** 6.76 Name: Modulated Signal Multiply out **FFT Size:** 1024 Center Frequency (Hz): 0 **Band Pass Filter** Bandwidth (Hz): 32k **Signal Source** Interpolation: 1 Sample Rate: 32k Gain: 1 Waveform: Cosine Sample Rate: 32k Frequency: 10k Low Cutoff Freq: 8.5k out **Amplitude:** 1 **High Cutoff Freq:** 10k Offset: 0 **Transition Width:** 1 **Initial Phase (Radians):** 0 Window: Hamming **Beta:** 6.76 **QT GUI Time Sink** Name: Demodulated Signal **Number of Points:** 1.024k Sample Rate: 32k **Autoscale:** Yes **Low Pass Filter Decimation:** 1 **Signal Source** Gain: 1Sample Rate: 32k Sample Rate: 32k **QT GUI Frequency Sink** Waveform: Cosine Multiply Cutoff Freq: 1.5k Frequency: 10k Name: Demodulated Signal **Transition Width:** 1 Amplitude: 1 **FFT Size:** 1024 Window: Hamming Offset: 0 Center Frequency (Hz): 0 **Beta:** 6.76 **Initial Phase (Radians):** 0 Bandwidth (Hz): 32k